

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

Listing of claims:

Claims 1-13 (Cancelled).

Claim 14. (Currently amended) An ~~The~~ isolated DNA molecule ~~comprising of claim 13 which comprises a polynucleotide encoding a biotin synthase, which polynucleotide is selected from the group consisting of:~~

a) SEQ ID NO: 7;

b) a polynucleotide which encodes the polypeptide of SEQ ID NO: 8 ; ~~because of the degeneracy of the genetic code, encodes a biotin synthase having the same amino acid sequence as that encoded by the polynucleotide a); and~~

c) a polynucleotide which hybridizes to the complement of the polynucleotide from a) or b) under stringent hybridizing conditions, wherein the stringent conditions include hybridizing and washing in 0.2XSSC at about 65° C and wherein the polynucleotide encodes a polypeptide having KAPA synthetase activity.

Claim 15 (Cancelled).

Claim 16. (Currently amended) The isolated DNA molecule of claim 14 ~~15~~ which comprises SEQ ID NO: 7.

Claims 17-36 (Cancelled).

Claim 37. (Currently amended) ~~An~~ The expression vector comprising of ~~claim 36 which comprises a polynucleotide encoding a biotin synthase, which polynucleotide is selected from the group consisting of:~~

a) SEQ ID NO: 7;

b) a polynucleotide which encodes the polypeptide of SEQ ID NO: 8, ~~because of the degeneracy of the genetic code, encodes a biotin synthase having the same amino acid sequence as that encoded by the polynucleotide a); and~~

c) a polynucleotide which hybridizes to the complement of the polynucleotide from a) or b) under stringent hybridizing conditions, wherein the stringent conditions include hybridizing and washing in 0.2XSSC at about 65° C and wherein the polynucleotide encodes a polypeptide having KAPA synthetase activity.

Claim 38. (Cancelled).

Claim 39. (Currently amended) The expression vector of claim 37 ~~38~~ which comprises SEQ ID NO: 7.

Claims 40-59 (Cancelled).

Claim 60. (Currently amended) A biotin-expressing cell transformed with
an ~~The cell of claim 59 in which the~~ expression vector comprising ~~comprises~~ a
polynucleotide ~~encoding a biotin synthase, which polynucleotide is selected from the~~
group consisting of:

a) SEQ ID NO: 7;

b) a polynucleotide which encodes the polypeptide of SEQ ID NO: 8 ;
~~because of the degeneracy of the genetic code, encodes a biotin synthase having the~~
~~same amino acid sequence as that encoded by the polynucleotide a); and~~

c) a polynucleotide which hybridizes to the complement of the
polynucleotide from a) or b) under stringent hybridizing conditions, wherein the stringent
conditions include hybridizing and washing in 0.2XSSC at about 65° C and wherein the
polynucleotide encodes a polypeptide having KAPA synthetase activity.

Claim 61 (Cancelled).

Claim 62. (Currently amended) The cell of claim 60 ~~64~~ in which the
expression vector comprises SEQ ID NO: 7.

Claims 63-82 (Cancelled).

Claim 83. (Currently amended) A process for the production of biotin
comprising culturing a biotin-expressing cell transformed by an expression vector,

wherein ~~The process of claim 82 in which~~ the expression vector comprises a polynucleotide ~~encoding a biotin synthase, which polynucleotide~~ is selected from the group consisting of:

a) SEQ ID NO: 7;

b) a polynucleotide which encodes the polypeptide of SEQ ID NO: 8 ,

~~because of the degeneracy of the genetic code, encodes a biotin synthase having the same amino acid sequence as that encoded by the polynucleotide a); and~~

c) a polynucleotide which hybridizes to the complement of the polynucleotide from a) or b) under stringent hybridizing conditions, wherein the stringent conditions include hybridizing and washing in 0.2XSSC at about 65° C and wherein the polynucleotide encodes a polypeptide having KAPA synthetase activity.

Claim 84 (Cancelled).

Claim 85. The process of claim 83 84 in which the expression vector comprises SEQ ID NO: 7.

Claims 86-92 (Cancelled).